iGraphics Project Proposal

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Hangman: A Classic Word Guessing Game

Overview

This project aims to develop a text-based version of the classic word guessing game, Hangman, in C++. The game will challenge players to guess a secret word letter by letter, with each incorrect guess the player gets closer to death.

Features

1. **Word Bank:** The game will include a word bank with varying difficulty levels, allowing players to challenge themselves with new vocabulary.

2. **Lives System:** Players will have a limited number of attempts (specifically 6) on every difficulty. Every wrong attempt loses a chance and gets one step closer to death, adding tension and strategic decision-making. Also, players can guess the whole word at a time. Correct guess will win the game. However, guessing the wrong word will also cost an attempt.

3. **Hints:** Total 3 hints will be provided in every game. Hint 1 is the number letters which can be understood from the number of dashes (one for each letter) visible on screen. The other two hints will be about the word e.g. meaning, parts of speech, theme of the word etc. However, using these two hints will cost one attempt each.

4. **Level:** There will be three difficulty levels- "Easy", "Medium" & "Hard". The words on these levels are selected on the basis of difficulty to guess.

5. **Input:** To make the game user-friendly, one can guess a letter in three different ways- clicking on the letter boxes on screen, navigating the letter boxes with arrow keys (up, down, left and right), directly inputting from keyboard. User can also input a complete word clicking on the "GUESS WORD" button.

6. **Clean & User-Friendly Interface:** The program will offer a clear and intuitive text-based interface with menus and prompts for user input. Also, the game is designed with a little backstory. Additionally, sound (with "ON" and "OFF" system) and other visual animations will definitely attract users.
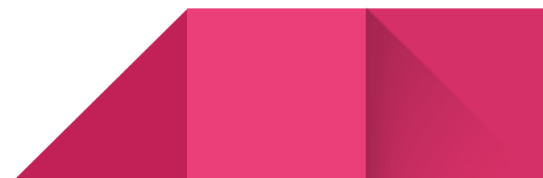
Project Timeline:

- **Week 8: Planning and Design**

    Design the Graphical Layout and User Interface using iGraphics

- **Week 9: Game mechanism**

    Develop the basic Hangman Game mechanism including some of the features mentioned before

- **Week 10: Feature inclusion**

    Include the extra features of hints and high score

- **Week 11: Word Bank**

    Add enough words and related hints on every difficulty level to get random and different words every time a user plays

- **Week 12: Graphical Beautification**

    Improve the overall graphics of the game to make it more visually appealing

- **Week 13: Testing and Debugging**

    Thoroughly test the codebase to identify and solve any underlying bugs